EUROPEAN CENTRAL BANK

EUROSYSTEM

T2S CHANGE REQUEST FORM			
General Information (Origin of Request) ☐ User Requirements (URD) or GUI Business Functionality Document (BFD) ☒ Other User Functional or Technical Documentation (SYS)			
Request raised by: 4CB	**Institute:** 4CB		**Date raised:** 21/01/2025
Request title: General Ledger file tracking and integrity functionality for contingency procedures			**Request No.:** T2S 0848 SYS
Request type: Common	**Classification:** Scope enhancement		**Urgency:** Normal
1. Legal/business importance parameter[1]: Low		**2. Market implementation efforts parameter[2]:** Low	
3. Operational/Technical risk parameter[3]: Low		**4. Financial impact parameter[4]:** Medium	
Requestor Category: 4CB		**Status:** Withdrawn	

Reason for change and expected benefits/business motivation:

The provision of the GLF[5] and BSS[6] by T2S to T2-CLM in the daily end of day processing might be affected by different circumstances requiring contingency procedures.
By November 2022 the following scenarios were identified and communicated to the MIB[7]:

1. T2S cannot generate the service- & currency specific GLF / BSS at all
2. T2S generates and sends to T2-CLM the service- & currency specific GLF / BSS but with a delay
3. T2S- GLF / BSS were generated but not sent to T2 CLM successfully
4. T2S- GLF / BSS were generated, sent to T2-CLM (internally) but T2-CLM cannot process it

The Operator has to analyse which of the scenarios applies without application-driven support to track the GLF or BSS transmission or identify integrity issues related to the file structure in case of manual data extraction.
Furthermore, the short time frame within the end of day processing to analyse the underlying issue provokes processing risks and further delays for the productive as well as test environments. The latter experiences from time to time consistency issues, if cash accounts are closed with remaining balances or if BIC-code changes affect the codes used in test environments.

Description of requested change:

In case the GLF & BSS processing is subject to the above stated scenarios, the Operator functionalities complementing T2 CR-0148 require an enhancement considering the following subtasks/objects:

1. the GLF & BSS related events
2. the GLF & BSS compilation process
3. the integrity of the GLF & BSS files concerning checksums of
   - the opening amount plus transactions against the final totals per line
   - the total final amounts
   - the total calculated final amounts
   - the difference between actual and calculated final amounts
4. the exchanged messages between T2S & T2-CLM to trigger the GLF & BSS transmission
5. the transmission time of the GLF and BSS files

[1] Legal/business importance parameter was set to 'Low' because there is no impact for the Scope Defining Documents. Furthermore, there is no expected business impact for users, as the change is aimed to support the T2S Operator in identifying issues with the GLF and adverting the need for contingency procedures.
[2] Market implementation effort parameter was set to 'Low' because the change will not be visible to users. It will not require any efforts for the participating CSDs, CBs or their communities.
[3] Operational/technical risk parameter was set to 'Low' as this change is not expected to have any operational impact on the side of the participating CSDs, CBs and their communities.
[4] Low < 100kEUR < Low-Medium < 200 kEUR < Medium < 400kEUR < High < 700kEUR < Very high
[5] general ledger file
[6] The balance snapshot (BSS) processing is foreseen to be introduced in T2S through the CR T2S-0794 in R2025.NOV. It foresees, on every DKK business day at 17:00, the sending of a balance snapshot from T2S to CLM for further processing before being sent to DKK Central Bank.
[7] The stated order is not representing a likelihood or urgency. It only follows the source of failure along the process.

6. the confirmation messages by T2-CLM
7. the consistency of used BIC codes used in test-environments
8. the consistency of closed accounts with remaining balances in test-environments

If the currency specific GLF or BSS cannot be compiled, the required account information has to be extracted from source and provided in a structured format, which is fulfilling the data structure requirements by T2-CLM. Additionally a separate file containing the checksum to ensure the integrity of the T2S General Ledger/Balance Snapshot file will be created as well. The algorithm for creating the checksum file must be identical over all TARGET services (T2, T2S, TIPS). The hash contained in the checksum file must be calculated using the algorithm SHA256 (hex encoded). Data format of the checksum file shall be UTF-8 (same as for General Ledger/Balance Snapshot file). Both files should be provided via the download functionality in the internal application.

Submitted annexes / related documents:

Outcome/Decisions:

*ECB on 21 January 2025: the ECB team checked the completeness of the CR template, assigned change request number CR-0848 and informed the CR initiator.
*CRG on 18 February 2025: the CRG agreed to launch the preliminary assessment of CR-0848
*CRG on 14 July 2024: the CRG agreed to recommend CR-0848 for authorisation by the T2S Steering Level.
*CSG on 18 July 2024: the CSG agreed to authorise CR-0848.
*NECSG on 18 July 2024: the NECSG agreed to authorise CR-0848.
*MIB on 31 July 2025: the MIB agreed to authorise CR-0848.
*CRG on 11 February 2026: the CRG agreed to withdraw CR-0848.

Documentation to be updated:

Preliminary assessment:

- **Financial Impact:** Medium
- **Impacted Modules**: T2S INTF, Scout and other 4CB internal tools
- **Other security impact:** no
- **Impact on other Eurosystem Services (T2, TIPS, ECMS):** there is corresponding CR T2-0148-SYS, no impact on TIPS and ECMS
- **Risks:** no

Findings:

The following Operator functionalities and documentation is foreseen

- Enhancement of monitoring capabilities related to GLF & BSS events, messages and transmissions
- Enhancement of monitoring capabilities to check the integrity of the GLF & BSS files concerning the following integrity requirements:
  - Verification of the opening amount plus transactions against the final totals per line (considering credit/debit indicators)
  - Verification of the total final amounts
  - Verification of the total calculated final amounts
  - Verification of the difference between actual and calculated final amounts
  - Counting of erroneous lines
  - Counting of the total number of statements
- Enhancement of monitoring capabilities to check the consistency of BIC codes in all test environments
- Enhancement of monitoring capabilities to check the consistency of accounts in all test environments, especially:
  - Account-closures with remaining balance <> 0
  - Account-balances greater or equal to quadrillions
- 4CB Documentation of the contingency procedures including the enhanced functionality. The already agreed .csv-Formats and Transmission conventions will not be changed, but as well included into the documentation.
- No functional impact on SETT domain. The only case that may involve SETT is the case when .csv files have to be provided by SETT to retrieve all cash account/opening/debited/credited account & closing balances that are present in Settlement database.

Open questions:

no

Detailed assessment: